

LSI.82US01 (03-1233)

## REMARKS

Claims 1-21 are currently pending in the subject patent application. In the subject Office Action, claims 1, 2, 4-6, 8, 9, 11-13, 15, 16, and 18-20 were rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent Application Publication 2003/0217358 to Thurston et al., since with regard to claims 1, 8, and 15, the Examiner stated that Thurston et al. teaches packaging a communication sequence into a script by a method comprising (Paragraph 29), providing said communication sequence that is a specific set of actions and action data (Paragraphs 34-39); for each of said actions, creating an action header comprising an action code and zero or more component specific commands (Paragraphs 40-43), and creating an action payload comprising zero or more of said action data; transmitting said script to said controller (Paragraphs 34-39); and communication to said component of said system by running said script by said controller by a method comprising: providing said script to said controller (Paragraphs 35-39); and for each of said action headers, executing a command corresponding to said action code (Paragraphs 35-39, and 19-52), transmitting said zero or more component specific commands to said component (Paragraphs 35-39, and 19-52); and transmitting said zero or more of said action data from said action payload to said component (Paragraphs 35-39, and 19-52).

The Examiner continued by stating that with regard to claims 2, 9, and 16, Thurston teaches said packaging of said communication is performed by a first computer system that is separate from said system controlled by said controller (Paragraphs 27-29); with regard to claims 4, 11, and 18, Thurston et al. teaches said method of packing said communication sequence further comprises: creating a header for said script (Paragraphs 40-43), said header comprising an identifier describing the specific component for which said script is intended (Paragraphs 40-43); and said method of communicating to said component of said system by running said script by said controller further comprises determining a descriptor of said component (Paragraphs 40-43); comparing said descriptor of said component to said identifier contained within said header of said script (Paragraphs 40-43); with regard to claims 5, 12, and 19, Thurston et al. teaches said method of packing said

LSI.82US01 (03-1233)

communication sequence further comprises: creating a header for said script (Paragraphs 40-44), said header comprising a compatibility list comprising one or more applicable revisions of firmware on said specific component for which said script is applicable (Paragraphs 44-47); and said method of communicating to said component of said system by running said script by said controller further comprises: determining a current firmware revision of said component; comparing said current firmware revision to said compatibility list contained within said header of said script (Paragraphs 44-47); and with regard to claims 6, 13, and 20, Thurston et al. teaches said component is a hard disk drive (Paragraph 27).

Applicants respectfully disagree with the Examiner concerning the rejection of claims 1, 2, 4-6, 8, 9, 11-13, 15, 16, and 18-20 under 35 U.S.C. 102(e) as being anticipated by U.S. Patent Application Publication 2003/0217358 to Thurston et al., for the reasons to be set forth hereinbelow.

Claims 3, 10, and 17 were rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication 2003/0217358 to Thurston et al. in further view of U.S. Patent 6,789,157 to Lilja et al., since the Examiner stated that with regard to claim 3, 10, and 17, Thurston et al. teaches said method of packing said communication sequence further comprises: creating a header for said script (Paragraphs 40-43), said header comprising a checksum (Paragraph 42); and said method of communicating to said component further comprises: reading said header of said script (Paragraph 53), computing a computed checksum of said script (Paragraph 53), comparing said computed checksum to said checksum contained within said header of said script (Paragraph 53). However, the Examiner continued that Thurston et al. fails to teach a CRC, whereas Lilja et al. teaches using a firmware update with a CRC instead of a checksum. The Examiner then concluded that it would have been obvious to one of ordinary skill in the art at the time of invention to substitute the use of the CRC of Lilja for the checksum of Thurston et al. in order to more completely check whether the firmware has been corrupted during transmission.

Claims 7, 14, and 21 were rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication 2003/0217358 to Thurston et

LSI.82US01 (03-1233)

al. in further view of U.S. Patent Application Publication 2002/0166027 to Shirasawa et al., since the Examiner stated that with regard to claims 7, 14, and 21, Thurston et al. fails to teach the firmware update script package being used to update a RAID controller, whereas Shirasawa et al. teaches said controller is a RAID controller (Paragraphs 8 and 9). The Examiner concluded that it would have been obvious to one of ordinary skill in the art at the time of invention to use the firmware update script package of Thurston et al. for updating RAID firmware as taught by Shirasawa et al. in order to homogenize the ability of each of the hard disk units to increase process speed and decrease error occurrence.

Applicants respectfully disagree with the Examiner's rejection of claims 3, 7, 10, 14, 17, and 21 under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication 2003/0217358 to Thurston et al. in view of other references for the reasons to be set forth hereinbelow.

The Examiner made several other references of record as being pertinent to applicants' disclosure, but did not rely upon these references in the present Office Action. Since these documents were not applied to the subject claimed invention, applicants believe that no further response is required.

Reexamination and reconsideration are requested.

Briefly, the present invention includes a system and method for generating a download script suitable for execution by a storage system controller using an offline utility to send commands and transmit data as required to update firmware or otherwise communicate to disk drives. The download script may be tested and verified offline before being transmitted to the controller for update implementation.

Subject independent claims 1, 8 and 15 in part recite the following: "1. A method for communicating to a component of a system controlled by a controller comprising: packaging a communication sequence into a script by a method comprising: ... creating an action header comprising an action code and zero or more component specific commands ...; transmitting said script to said controller; and communicating to said component of said system by running said script by said controller by a method comprising: ... transmitting said zero or more component specific commands to said component, and transmitting said zero or more of said

LSI.82US01 (03-1233)

action data from said action payload to said component." (editing and emphasis provided by applicants to point out certain structure); "8. A system for communicating to a component of a system controlled by a controller comprising: a first computer system adapted to packaging a communication sequence into a script by a method comprising: ... creating an action header comprising an action code and zero or more component specific commands, and creating an action payload comprising zero or more of said action data; and a controller adapted to communicate with said component of said system by a method comprising: providing said script to said controller ... transmitting said zero or more component specific commands to said component, and transmitting said zero or more of said action data from said action payload to said component." (editing and emphasis provided by applicants to point out certain structure); and "15. A system for communicating to a component of a system controlled by a controller comprising: a first means for packaging a communication sequence into a script by a method comprising: ... creating an action header comprising an action code and zero or more component specific commands ... ; a second means for communicating with said component of said system by a method comprising: ... transmitting said zero or more component specific commands to said component, and transmitting said zero or more of said action data from said action payload to said component." (editing and emphasis provided by applicants to point out certain structure). Thus, the independent claims of the present invention require that component specific instructions are provided to a system controller to update a chosen component.

Thurston et al. in Paragraph [0069] teaches that: "The implementations provide a firmware update application for updating firmware on different types of hardware devices. The firmware update application comprises a device independent firmware update utility and a plurality of device dependent plug-in modules. The device independent firmware update utility initiates the update of firmware on a plurality of different types of hardware devices and requests device specific functions from device dependent plug-in modules. A different device dependent plug-in module may be provided for each type of hardware device. Thus the firmware update application separates device independent firmware update

LSI.82US01 (03-1233)

functions from device dependent update functions." (emphasis added by applicants). Claim 1 of Thurston et al. further illustrates the teaching of a device independent firmware update utility: "A method for installing firmware, the method comprising: receiving a firmware image by a device independent application; and requesting a device dependent application to install the firmware image on at least one hardware device, wherein the at least one hardware device is determined by the device dependent application." Thus, Thurston et al., in contrast to the present claimed invention, requires the system controller to request a device dependent application to install a firmware image after receiving a firmware image by a device independent application. Moreover, Thurston et al. requires that the firmware update application separate device independent firmware update functions from device dependent update functions. No such requirement is recited in the present claimed invention. Therefore, applicants respectfully believe that Thurston et al. teaches away from the present claimed invention, and that the Examiner has picked and chosen portions of the Thurston et al. disclosure to craft the rejection under 35 U.S.C. 102(e) set forth in the present Office Action.

Turning now to the rejection of claims 3, 7, 10, 14, 17, and 21 under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication 2003/0217358 to Thurston et al. in view of other references, since applicants believe that Thurston et al. teaches away from the present claimed invention, applicants believe that the Examiner has not made a proper *prima facie* case for obviousness as is required under 35 U.S.C. 103(a).

In view of the discussion presented hereinabove, applicants believe that subject claims 1-21 are in condition for allowance, and such action by the Examiner at an early is earnestly solicited.

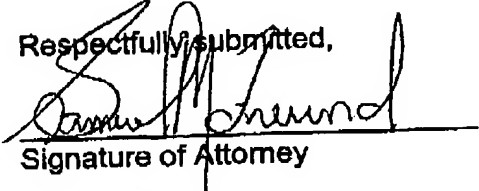
LSI.82US01 (03-1233)

Reexamination and reconsideration are respectfully requested.

Date: January 17, 2006

Reg. No. 30,459  
Phone: (970) 492-1100

Respectfully submitted,

  
Signature of Attorney

Samuel M. Freund  
Cochran Freund & Young LLC  
2026 Caribou Drive, Suite 201  
Fort Collins, Colorado 80525